

## IN THE CLAIMS:

1. (Original) A duplexer comprising  
a ladder filter and a multimode filter that are formed on an identical surface of a predetermined substrate,  
a first comb-like electrode of the ladder filter and a second comb-like electrode of the multimode filter having an identical layer structure with an equal film thickness,  
the first comb-like electrode and the second comb-like electrode being formed with single-layer films mainly containing aluminum,  
the relationship among the film thickness  $h$  of the first comb-like electrode and the second comb-like electrode, the center frequency  $f_1$  of the frequency band of the ladder filter, and the center frequency  $f_2$  of the frequency band of the multimode filter, being expressed as:

$$300 \leq h \times f_1 \leq 480$$

$$300 \leq h \times f_2 \leq 430.$$

2. (Original) The duplexer as claimed in claim 1, wherein the relationship among the film thickness  $h$ , the center frequency  $f_1$ , and the center frequency  $f_2$ , is expressed as:

$$300 \leq h \times f_1 \leq 420$$

$$350 \leq h \times f_2 \leq 410.$$

3. (Currently Amended) A duplexer comprising  
a ladder filter and a multimode filter that are formed on an identical surface of a piezoelectric substrate,  
a first comb-like electrode of the ladder filter and a second comb-like electrode of the multimode filter having an identical layer structure with an equal film thickness,  
the first comb-like electrode and the second comb-like electrode being formed with single-

layer films mainly containing aluminum, or single- or multi-layer films including n layers (n being an integer of 1 or greater), the n layers including a layer mainly containing a metal other than aluminum,

the relationship among the film thickness  $h_k$  of the kth layer (k being an integer of 1 or greater) of the first comb-like electrode and the second comb-like electrode, the specific gravity  $a_k$  of the metal of the kth layer with respect to aluminum, the center frequency  $f_1$  of the frequency band of the ladder filter, and the center frequency  $f_2$  of the frequency band of the multimode filter, being expressed as:

$$\left[ \left[ \begin{array}{l} 300 \leq f_1 \times \sum_{k=1}^n (\alpha_k \times h_k) \leq 480 \\ 300 \leq f_2 \times \sum_{k=1}^n (\alpha_k \times h_k) \leq 430 \end{array} \right] \right]$$

$$- \quad 300 \leq f_1 \times \sum_{k=1}^n (a_k \times h_k) \leq 480 \quad --$$

$$300 \leq f_2 \times \sum_{k=1}^n (a_k \times h_k) \leq 430$$

4. (Currently Amended) The duplexer as claimed in claim 3, wherein the relationship among the film thickness  $h_k$ , the specific gravity  $a_k$ , the center frequency  $f_1$ , and the center frequency  $f_2$ , is expressed as:

$$\left[ \left[ \begin{array}{l} 300 \leq f_1 \times \sum_{k=1}^n (\alpha_k \times h_k) \leq 420 \\ 350 \leq f_2 \times \sum_{k=1}^n (\alpha_k \times h_k) \leq 410 \end{array} \right] \right]$$

$$- \quad 300 \leq f_1 \times \sum_{k=1}^n (a_k \times h_k) \leq 420 \quad --$$

$$350 \leq f_2 \times \sum_{k=1}^n (a_k \times h_k) \leq 410$$

5. (Original) The duplexer as claimed in claim 1, wherein the predetermined substrate is a rotated Y-cut X-propagation lithium tantalate substrate on which surface acoustic wave propagates in the X direction.

6. (Original) The duplexer as claimed in claim 1, comprising a plurality of multimode filters.